ClearVision™

Beyond Cockpit Boundaries

Elbit Systems Commercial Aviation
Visionary Avionics

We provide cutting-edge electronic avionics systems and advanced cockpit technologies for commercial aviation platforms of all segments. Building on Elbit Systems' four decades of experience in the aerospace, our pilot-centered development team leverages field-proven technologies to produce a specialized range of vision systems for the commercial aviation market.

Our commercial product line of enhanced flight vision systems (EFVS) combines a unique ClearVision™ family of Skylens wearable head-up displays (HUD) with synthetic vision systems (SVS), real-time enhanced vision systems (EVS) and Combined Vision Systems (CVS).
Our industry experience, commitment to our partners, and world-class aviation electronics solutions are relied upon by leading aerospace companies around the globe.

Technical Specifications

	Clearvision SD	Clearvision WD	Clearvision SMART
EVS	ClearVision™ EVS Prime Multispectral	ClearVision™ EVS Prime Multispectral	Entry-Level EVS
Display Unit	Clearvision™ HUD Fully Operational	**NEW!** SKYLENS Wearable Display	**NEW!** SKYLENS Wearable Display
Operational Credit For Landing	Applicable	Applicable	Situational Awareness Only
Co-pilot System	Enabled	Enabled	N/A
Clearvision APPS			
Basic package	Pre-installed	Pre-installed	Optional
Advanced package	Optional Ready to instal	Optional Ready to instal	N/A
SVS / CVS	Optional Ready to instal	Optional Ready to instal	Optional Ready to instal

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Follow us on

ClearVision™

Complete End-To-End, All Weather EFVS Solution

FROST & SULLIVAN
2014 BEST PRACTICES AWARD
GLOBAL COMMERCIAL AVIONICS
NEW PRODUCT INNOVATION LEADERSHIP AWARD

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ClearVision™

Fly Through Any Sky!

Elbit Systems' ClearVision™ is a complete, Enhanced Flight Vision System (EFVS). Clearvision™ covers the full flight envelope, and overcomes extreme weather conditions and low visibility situations – both day and night. Clearvision™ allows for intuitive out-of-the-window flying, minimizing the dependency on airport instruments, reducing landing minima and providing takeoff credit. The 4th generation multispectral EVS detects incandescent and LED runway lights with provisions to support color display. The ClearVision™ display fuses conformal flight guidance symbology with synthetic vision presentation and high-resolution video on an operational HUD or the newly released SKYLENS wearable display. The Clearvision™ suite has already been selected by leading Part 25 platform manufacturers around the world.

ClearVision™ at a glance

- Highly integrated solution, all by one supplier
- Suites forward and retrofit platforms
- Minimum weight
- Minimum installation & Integration
- Minimum cockpit footprint
- Designed certificate landing credit up to 1000′ RVR (50′ DH) (DO-315A)
- Synthetic Vision System (SVS) Ready
- Combined Vision System (CVS) Ready
- New optional SKYLENS Wearable display unit

ClearVision™ Apps
- Fully customizable and upgradable
- Increasing safety and situational awareness
- Maximizing Clearvision™ unique hardware capabilities

ClearVision™HUD
- 1280x960 High resolution
- 40°x30° (HxV) FOV

SKYLENS Wearable Display
- 1280x1024 High resolution
- Monochrome display
- Projection Monocular, Off-The-Visor

ClearVision™ EVS
- 1280x960 High resolution
- Multispectral
- Terrain awareness video
- LED and incandesce runway light detection
- 35°- 26.5°(HxV) Wide FOV

Computer Unit
- ARINC 600 Standard. Fully certified building blocks
- Operational applications
- Supports Clearvision™HUD or Skylens display units

- **The HW and SW are developed in accordance with RTCA DO178B, DO254, DO160G, DO200A

ClearVision APPS

Easily installed on any platform with ClearVision™ hardware, the varied package of ClearVision™ applications presents a thorough solution for increasing safety and situational awareness. All applications are specifically designed to maximize the proprietary integrated hardware capabilities of ClearVision™, thus no modification or additional hardware is required to customize or update the software package. ClearVision™ applications are designed in accordance with DO178B standard on Arinc 653 OS.

CV TAXI

Taxi directions on a 2D or conformal 3D map, on ClearVision™ HUD or SKYLENS wearable display. Including EVS motion detection algorithm to alert Runway potential incursion or extrusion.

CV CLOUD

3D Synthetic display of clouds and active turbulences from weather radar or satellite data on ClearVision™ HUD or SKYLENS.

CV TAWS

Ground proximity alerts and 3D synthetic vision (SVS) presentation of predicted collision trajectory.

CV NAVIGATOR

Provides obstacle detection, based on EVS image.

CV TRAFFIC

Surrounding traffic symbols around the aircraft route (based on ADS-B data). Displayed on ClearVision™ HUD or SKYLENS wearable display, to establish visual own separation.

CV SVS

Synthetic vision based on full database of runways, obstacles, terrain and flight plan information ready to be displayed on-time and on demand.

CV LIGHTS

Runway specific lights identification and alerts, when runway excursion may occur.

CV SIGHT

SKYLENS Special

Advanced Line-Of-Sight (LOS) capability, allowing the crew to designate objects out of the window to reduce communication time span and increase safety.